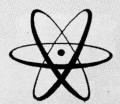
# **SPRAGUE®**

THE MARK OF RELIABILITY



SPRAGUE ELECTRIC COMPANY

CONCORD, NEW HAMPSHIRE

VOLUME IV

JANUARY-FEBRUARY, 1965

NUMBER 6

# Sprague Electric Announces New Plant Site In Worcester, Mass. For Microcircuit Production

The Sprague Electric Company announced plans for construction of a new major manufacturing plant in Worcester, Massachusetts.

The new Sprague Plant will be primarily devoted to development and manufacture of microelectronic circuits. A Company spokesman estimated that the new facility may eventually contain about 250,000 square feet of factory space and employ more than 3,000 persons.

Pending start of construction on the first section of the Plant next spring, the new facility will be housed in temporary rented facilities in the H. E. Shaw Building on Belmont Street in Worcester. Use of the temporary quarters will provide for training a nucleus of employes.

Approximately forty acres of land have been optioned for purchase from the City of Worcester

Continued on Page 4, Col. 4

# **Annual Safety Report** Presented For Plant

The Annual Safety Report for the Concord Plant was presented all Foremen, Department Heads, and Managers by Corporate Safety Supervisor, Anthony Sacco, on December 15, 1964.

The report, covering the period July 1, 1963 to June 30, 1964, was good, but pointed out the need for care in several areas, including the handling of materials and eye protection. During this period, the Plant dispensary handled nearly 7,700 cases. Of this number, 451 were of industrial origin. This means that 17 times as many people visited the nurse for nonindustrial or non-work connected reasons, as for reasons connected with the job. The majority of these visits can be traced to various minor illnesses.

Though the number of job connected visits was about 100 less than the same period the year before, Company officials are still concerned about the lack of a safety awareness on the job, as well as at home. It is imperative that this awareness be a major concern of all of us on the job, on the road, and at home.

# Year-End Distribution And Other Benefits For Sprague Employes

A year-end distribution of met them on December 31, 1964, \$100.00 was made to all eligible employes on December 17, 1964. Employes with at least six months seniority on December 1, 1964, and who received a minimum of 25 pay checks during the eleven month period preceding December 1, 1964, and who were still in the employ of the Company on December 18, were eligible. Those who did not meet these requirements, but who

were eligible for a similar distribution early in January, 1965.

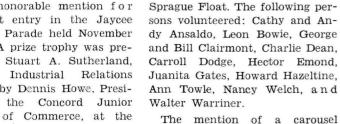
The presentation of the December 17 checks were made in their respective areas by Mr. Parrish and Mr. Ishler, and were a welcome boon to holiday shoppers.

In addition to the distribution, announcements were made of a general wage increase of 2 and Continued on Page 2, Col. 3

# Honorable Mention Trophy Awarded For The Christmas Carousel Float

Sprague Electric employes were and long hours of work for the awarded honorable mention for their float entry in the Jaycee Christmas Parade held November 29, 1964. A prize trophy was presented to Stuart A. Sutherland, Assistant Industrial Relations Manager, by Dennis Howe, President of the Concord Junior Chamber of Commerce, at the January 13 Chamber of Commerce meeting.

Early in November, a meeting was held for all employes interested in contributing ideas, talent,



seemed to be most popular among the Committee members. Before materials could be gathered together, a design had to be put on

Continued on Page 2, Col. 4



The Sprague Electric Christmas Carousel as it was seen going down the Main Street of Concord.



A trophy was awarded to the Sprague Electric employes for their entry in the Jaycee Christmas Parade.

# R. C. Sprague, Jr. Named Consultant, Puerto Rican EDA

Robert C. Sprague, Jr., Senior Vice President, Corporate Relations, has been appointed a Special Honorary Consultant to the Economic Development Administration of the Commonwealth of Puerto Rico, according to a recent announcement made by Ivan E. Irizarry, District Manager of the EDA.

The voluntary group is composed of United States executives whose companies have subsidiary operations in Puerto Rico. Members are designated on an area basis and Mr. Sprague, Jr. will be concerned with promotional activities in the New England states.

Companies interested in establishing business operations in Puerto Rico are urged to contact a consultant of the Economic Development Administration in the United States who will be able to answer their inquiries as to business conditions, opportunities, and general business climate.

# Mr. Sprague Forecasts Increased Growth In Non-Military Areas Of Electronics Business

Although 1964 showed an overall increase in electronics industry sales, the rate of growth was slowed by a tapering off in shipments of our products to the government market which was offset only in part by higher commercial volume. Industry sales at factory prices totalled \$16.2 billion, compared to \$15.1 billion in 1963, an increase of 7 per cent against 9 per cent in 1963. The best gain was recorded in industrial products, which gained 12 per cent compared to 13 per cent the previous year. Consumer products sales were up 10 per cent against 6 per cent in 1963, while government products increased only 4 per cent compared to 11 per cent in the previous year.

Increasing competitive pressures as manufacturers of both systems and circuit components adapted to these shifting patterns in our domestic markets, as well as continued competition from imports, made 1964 a difficult year for many electronics concerns. While there will likely continue to be many problems to be faced in 1965, the general outlook for our industry's sales is good.

The greatest relative increase in rate of growth in 1964 was the consumer products segment, which recorded a gain in shipments to some \$2.84 billion against \$2.58 billion in 1963. The market for television sets increased substan-



Robert C. Sprague

tially, reflecting not only the growing importance of color TV, but also a better than anticipated gain in monochrome sets. Factory shipments of color TV sets were in excess of 1,400,000, or nearly double the 747,000 shipped in 1963. Since there was relatively little change in the average value of color sets, dollar sales nearly doubled to \$485 million against \$258 million the previous year. Factory sales of Americanmade monochrome TV apparently exceeded 7.9 million sets, compared to 7.0 million in 1963; dollar volume amounted to some \$835 million. Thus, total TV sales were about \$1.3 billion compared to \$1.1 billion in 1963.

Continued on Page 2, Col. 1

# Sprague Electric Exhibits Products At N. H. Industry Week Show



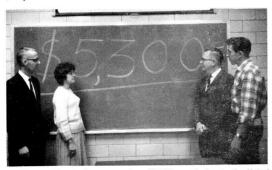
Edward Noel, Industrial Relations Manager at the Nashua Plant is showing University of New Hampshire student, Richard W. Lunt of Dover, N. H., some of the Sprague Electric products exhibited at the show.

For the fourth consecutive year, products manufactured at Sprague Plants in Concord, Nashua, and Plymouth, New Hampshire were prominently displayed at a threeday New Hampshire Industry Week Show at the University of New Hampshire in Durham on January 5, 6, and 7.

The display, designed and fabricated by the Advertising Department in North Adams, was in the form of six tall fiberglass screens holding twelve colorful panels with the various products affixed. It also included three easels with pictures of the three New Hamp-

Continued on Page 4, Col. 3

## Company And Benefit Fund Contribute \$ 5.300 To Concord United Fund Drive



The Sprague Electric Company made a \$2,000 contribution to the United Fund and the Sprague Electric Concord Employes Benefit Fund contributed \$3,300. This brought the total contribution to \$5,300. Looking over the final figure are left to right: Timothy Woodman, Campaign Chairman to the United Fund; Elinor McManus, Benefit Fund Secretary; Thomas Richardson, Board of Governors member of the United Fund; and Paul Gaillard, Administrator to the Benefit Fund.

#### Forecast . . .

Continued from Page 1, Col. 5

In radio, approximately 19 million domestically produced sets were sold, against 18.4 million the before. Home radio sets which had been expected by many to decline from the 1963 level, wound up with a modest increase to about 10.7 million, against 10.4 in 1963. Automobile radio sales totalled about 8.3 million compared to 7.9 million, and would have shown a larger gain had it not been for a two-month strike in the plants of the largest user. Sales of phonographs and radiophonograph combinations were probably about even in units and

Foreign imports continue to be a serious problem for the makers of home entertainment products but a recent analysis made by the Electronic Industries Association indicated that direct imports of radios and radio-phonographs accounted for slightly less than 50 per cent of the total U.S. market in 1964, compared to 53 per cent in 1963. In television, the percentage also dropped, from 3.1 per cent to about 2.5 per cent of the market. This is an encouraging sign that consumers are becoming aware of the greater value offered by American made pro-

The outlook for consumer electronics sales in 1965 is good, and I look for total sales to be approximately \$3.1 billion. Barring a business slowdown of major proportions, I would look for a good increase in color TV to perhaps 2.2 million sets, and for monochrome sets to decline modestly.

Percentagewise, the best gain in 1964 was recorded by the induselectronics market, which rose 12 per cent to \$3.43 billion from \$3.06 billion in 1963, based

on new and more complete data recently made available by EIA. Historically, computers and dataprocessing equipment have been the most rapidly growing segment of the industrial market but this was not the case in 1964 as the growth rate for this type of equipment slowed to 10 per cent with the completion of initial large shipments of medium-sized business computers. It now appears probable that the growth rate in the computer market will remain subnormal for perhaps a year or so as the new and more powerful systems recently introduced begin to be delivered in quantity.

Pacing the growth in industrial electronics in 1964 was the broad category of medical, scientific, educational and other industrial equipment of various types totalling \$365 million compared, to \$314 million in 1963. Also showing an above average gain was the very large market for communications. broadcasting, commercial sound and navigational equipment. This is now a \$1 billion business of which about half represents commercial communications gear.

Prospects for virtually all segments of the industrial electronics market in 1965 are good, and I look for total shipments to this market to reach some \$3.8 billion or 10 per cent above 1964.

This has been a confusing year for the supplier of military electronics systems and components, a period in which effective planning has been all but impossible due to the many and often sudden changes that have taken place in various defense programs. Total electronic shipments to the Government market in 1964 approximated \$9.3 billion, against \$8.9 billion in 1963 but virtually all of this gain was in the nonmilitary space programs, with defense procurement of electronic

#### EDITORIAL STAFF

Manager of Corporate Publications Marion H. Manion Local Editor Stuart A. Sutherland

REPORTERS
Sandra Baker, Virginia Bickford, Cecile Boisvert, Roberta Chase, Fred Clemens, Simone Croteau, Everett Cutter, Carroll Dodge, Judith Everett, Barbara Gibbs, Jeanne Gingras, Norma Glover, Joyce Heath, Barbara Mayo, Mary Mitchell, Jane Morrill, Sandra Murphy, Blanche Prescott, Avis Small, Ann Towle, Nancy Verville, Marguerite Willard, Wayne Wooley.

SPORTS REPORTERS

Albert Sieradski and Carol Thornton

#### Concord Welcomes



John B. Kellom began employment with Sprague Electric Comvember 23, 1964 as a Junior

porting to J. Gerard Bouchard. Mr. Kellom received an AB degree in Physics from Colby Colege in 1960 and served with the United States Navy as an Intelligence Officer in Norfolk, Virginia, prior to his employment with Sprague.

Mr. Kellom, his wife, the former Linda Zeilstra of West Barrington, Rhode Island, and 8 month old daughter, Susan, reside in Con-

#### Credit Union Declares Semi-Annual Dividend

The Board of Directors of the Sprague Concord Credit Union have declared a dividend of 4.8 per cent on Credit Union shares for the six month period ending December 31, 1964.

The dividend, representing a total of \$1,683.06 in interest for share holders, was declared at the regular monthly meeting on December 29, 1964. The individual interest will be posted on share cards during the month of Jan-

#### Year-End . . .

Continued from Page 1, Col. 2 one half per cent with a minimum of 4 cents per hour to hourly rated employes, and the addition of 3.2 cents per hour to bonus rates effective January 8, 1965, liberalization of rules for death in the family benefits, and changes in vacation policy for long service employe:

With the distribution and other announcements, went the Company's best wishes for a Happy and Prosperous New Year for all

systems and services increasing only very slightly, from \$7.7 billion to \$7.9 billion. In the fiscal year ended last June, total procurement spending by the Department of Defense declined to \$15.3 billion from \$16.6 billion in fiscal 1963, and despite a slight gain in the percentage of electronics to total procurement, our industry's share of DOD procurement declined from \$4.7 billion to \$4.4 billion. A further drop to \$4.3 billion is in prospect for the current fiscal year.

The space programs of NASA took some \$1.3 billion of electronics goods and services in 1964 out of a total space budget of \$4.2 billion, and by 1970 should be approaching \$2 billion out of a total \$6.5 billion space budget. Thus, I think it is increasingly clear that the electronics industry will have to accommodate, after a decade of constantly growing military expenditures, to a greatly reduced rate of growth in military spending.

For the manufacturer of circuit components, 1964 was generally characterized by continuing slow shipments to the military market. particularly in the early months of the year. As the year progressed, the rate of incoming orders for military circuits began to rise, but delivery schedules have been

Continued on Page 4, Col. 1

## From The Vice-President's Desk



This is the time of year we like to look back to see what we have accomplished and hopefully learn things that will aid us in have accomplished and hopefully learn things that will aid us in the future. The announcement of Phileo a little over a year ago that they were going out of the "Electro-Precision" transistor business made us face up to the necessity of independent operation at Sprague. It also brought to us a number of people with background in "Electro-Precision" transistors. We procurred a large amount of equipment to improve our capability of making and testing these transistors. testing these transistors.

It may surprise you to know that we have been in the custom of buying hundreds of different kinds of replacement parts from Philco. We are continuing to acquire the extra know-how to carry on a completely independent operation from them. While this additional learning was progressing, we did make and ship many more "Electro-Precision" made transistors than Sprague ever produced in the past. I am looking forward to a successful year in 1965 in "Electro-Precision" transistors.

During the past year the "SEPT and UNICIRCUIT" has not

been rewarding from a business standpoint, but we made some large strides in improving our know-how. We are supplying a variety of these products to our potential customers, and I am confident our people will obtain some substantial business in these areas in 1965. We are competing with the originators of the technology and many others who have gotten a head start on us. Our position and rewards in the future will be determined by our individual and collective contributions to the job ahead!

W. C. Sabler

# Three Concord Teams Complete Value Engineering Seminar



Preparing their final presentations at the Value Engineering Seminar are from left to right, Michael Smith, Robert Collette, Edward Jakusik, David Anderson and Norman Robinson.

Three teams from the Sprague Plant in Concord were among seven Value Engineering Teams giving final presentations at the first Value Engineering Seminar completed outside North Adams.

The presentations given on November 17, 1964, represented teams from Sprague operations in Nashua, Concord, and Plymouth, New Hampshire and Barre, Vermont. The individual team presentations represented weeks of hard work and study on the part of the five men teams, under the direction of Donald Meiklejohn, Department Head of Methods in North Adams, assisted by Louis Scalise, also of Methods.

Team objectives were the organized, systematic approach to reducing the cost of a manufacturing function of an assigned

#### Float . . .

Continued from Page 1, Col. 2 paper to determine how the carousel should look. This was done by Hector Emond. To give it a Christmas like effect, reindeer were used in place of ponies and candy canes were placed around the outside of the carousel extending from the base to the top

product, without impairing the quality of the product. The presentations at the end of the study were directed toward the areas of immediate and long range change and in many cases represented spectacular savings.

Representing the three Concord teams were Team Captain, Ed Jakusik, Mike Smith, Bob Collette, Dave Anderson and Norm Robthe inson. studying capacitor. SEPT Engineering was the subject area for Team Captain, Bob Gagne, John Gleason, John Phillips, Rod Foster and George O'Brien. The final team. headed by Ted Jasiewicz and including Dave Peth, Bob Dandy, Nick Edwards. and George O'Brien studied the MADT tran-

frame. The top was covered by red net with a gold Christmas tree placed in the center.

The Committee worked many hours during the evenings and on week-ends putting the float to-gether. The four reindeer were cut from thin plywood and the candy canes were made from old stove pipe which they painted white and wrapped with red tape.

Continued on Page 8, Col. 3

Published for the employes of the Concord, New Hampshire Plant of the Sprague Electric Company.



# Four Long Service Concord Employes **Recently Promoted To New Positions**

Foremen and two Engineering Assistants was recently announced.

Nathan Chapman and Lindsay Gregory were named Foremen for the Final Test Department on December 1, 1964 reporting to Charles Gray.

Nate, a native of New London, Connecticut, received his education from Belmont High School, Belmont, New Hampshire, St. Michael's College, Winooski, Vermont, and the Sprague Franklin Program.

He began employment with the Sprague Electric Company in January, 1960 as a Technician and from 1962 until his recent position was Supervisor for Final

Nate resides in Pembroke with his wife, the former Arline Maheux of Laconia, and two children. Daniel Edmund and Lisa Mar-

Lindsay Gregory began employment with the Sprague Electric Company in June, 1960, as a Technician and from 1962 until his present position as Foreman, was a Supervisor in Final Test.

Lindsay, a native of Sunapee, is a graduate of Sunapee High

He lives in Concord with his wife, the former Sandra Whitehead of Contoocook, and two children, Mark Jay and Kimberly

On November 2, 1964, Robert Curtis was named Engineering Assistant for the Transistor Device

The appointment of two new Development Engineering Department reporting to J. Gerard Bouchard.

> Bob began employment with Sprague Electric in February, 1960, as a Solution Mixer. In October of the same year he was reclassified to a Lab Technician and in September, 1961, up until his recent promotion, he was a Sr. Lab Technician.

> Bob, a native of Pittsfield, received his education at Pittsfield High School and Keene Teacher's

> He resides in Barnstead with his wife, the former Judith Genest of Pittsfield, and sons, Gary Edward and Michael Wayne.

> On January 4, 1965, Grant Avery was named Engineering Assistant for the Transistor Device Development Engineering Department, reporting to Stephen Cul-

> Grant began employment with the Sprague Electric Company in August, 1958, as an Etch-Plate Technician. From 1959 to 1960 he was employed as a Production Maintenance Technician, and from 1960 until his recent position, was employed as a Development Technician.

Grant received his education from Concord High School and from the United States Air Force Schools of Radio Maintenance and Electronics Maintenance.

He resides in Concord with his wife, the former Elaine Barrington of Billerica, Massachusetts, and three sons, Eugene, 6, Donald, 4, and Alan, 2.

## 220 Employes Honored At Five Year Banquet

Two hundred twenty Sprague Concord employes were honored Thursday evening, November 19, 1964, at a Service Award Banquet held at the New Hampshire Highway Hotel.

Recipient of a pin in recognition of 10 years of service with Sprague Electric was Bill McDonald, who joined the Company in North Adams, Massachusetts. The remaining recipients received recognition for completing five years of service with the Company.

Acting as Master of Ceremonies for the evening was New Hampshire Industrial Relations Manager. Aldem Trottier. Company President, Ernest L. Ward, addressed the gathering. Congratulatory remarks were also made by H. Kenneth Ishler, Vice President of the Semiconductor Division and Robert L. Parrish, General Manager of the Company's Tantalum Operations.

## F. McCarthy Named New Corp. Mgr. Of Protection, Safety And Security

Announcement of the promotion of Francis J. McCarthy to the position of Corporate Manager of Protection, Safety and Security was



made recently by John D. Washburn, Corporate Director of Personnel. Mr. McCarthy has assumed the duties formerly held by John F. Flaherty who retired on December 31. Henry G. Goetsch, Corporate Facility Security Officer, and Anthony N. Sacco, Corporate Safety Supervisor, will report to Mr. McCarthy as will the Watchmen.

A former Detective Sergeant in the Massachusetts State Police. Mr. McCarthy joined Sprague Electric in June 1962 after completing 20 years of service with the State Police. As a Section Head in Protection, Safety, and Security he served as Mr. Flaherty's assistant.

A native of Holyoke, Massachusetts, Mr. McCarthy graduated from Holy Rosary High School in that city and from Bay Path Business School in Springfield. He served in the U.S. Army Air Force from 1942 to 1945 and on leaving the service was a Staff Sergeant Instructor-Instrument Flying.

Mr. McCarthy and his family make their home on Tremont Street in North Adams.

fund of over \$1,900.00 and undivided earnings of \$5,000.00 have accumulated. The current dividend is 4.8 per cent on shares held to the end of the dividend periods, June 30 and December 31.

The Credit Union presently has plenty of money for loans. Regulations regarding loans are posted on the Credit Union Bulletin Board in the employe entrance. If you have additional questions, see your Credit Union officers or

# Service Award Banquet



Receiving their Five Year Service Pin and congratulations from Messrs. Ward, Ishler, Parrish, and Trottier are, left to right: Helen Gilmore, Ted Cichon, Jeannette Avery, Ki Bourque, Margaret Savoy, Gerard Stanley, and Nancy Huckins, all of Department 422.



Mr. Ishler is pictured here with five Five Year Service employes. Left to right are Larry Cotter, Department 721; Thomas Richardson, Janet Sherburne, Department 426; Antoinette Counter, Department 426; and Frank Bilodeau, Department 721.



Mr. Parrish and Mr. Puppolo congratulate Louise Josephson of Department 720 and Roberta Chase of Department 729 for their five years of service



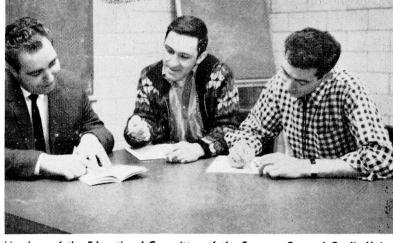
Mr. Parrish is pictured here with three more five year service employes. Left to right are Armand Nolin, June Florence, and Alice Benoit, all of Depart-

## Credit Union Dividends Considered Interest

Under the new federal regulations, Credit Union dividends must be reported as income from interest. They are not classified the same as corporate stock dividends, and must be reported, even if you receive less than \$10.00.

If you are paid dividends totaling \$10.00 or more, the Credit Union is required by law to report this to the Internal Revenue Service. The Credit Union will send you a copy of the report (Form 1099) for your information. Do not attach this to your income tax return.

# Credit Union Plans Membership Drive



Members of the Educational Committee of the Sprague-Concord Credit Union, Hector Emond, center, and Paul Gaillard, right, discuss plans for a membership drive with President, George Mills, left.

The Education Committee of the Sprague Concord Credit Union recently announced plans for a membership and increased savings drive among Sprague employes in Concord and Plymouth, New Hampshire.

Committee members, Paul Gaillard and Hector Emond, are coordinating the drive with Credit Union President, George Mills, in an attempt to strengthen the existing Credit Union, in order to better serve the membership.

Plans call for an extensive information program, designed to inform Sprague employes of the many advantages and conveniences offered by Credit Union membership. It will point up the advantages of payroll deduction, insured loans and savings, low interest rates for borrowers and high interest paid on savings.

Present membership stands at 702, shares on deposit of over \$102,000 and loans totaling \$79,000 out to 335 members. A reserve

## Future For Three Sprague Employes Enhanced As They Complete Company Sponsored Courses



Congratulating Richard Beck for receiving his completion certificate from Alexander Hamilton Institute are Thomas Richardson, Silicon Factory Manager, and H. Kenneth Ishler, Vice President, Semiconductor Division.



Joseph Fournier, Chief Engineer, Tantalum R&E Lab, left and Robert L. Parrish, General Manager, Solid Tantalum Capacitor Operations, right, congratulate Herbert Wishart for receiving his diploma from ICS.



Richard MacLeod received a completion certificate from The Water Conditioning Foundation. Presenting him with his certificate is Robert L. Parrish, General Manager, Solid Tantalum Capacitor Operations, and looking on is Ralph Stevens, Senior Engineer, Transistor Device Development Engineering Lab.

#### Forecast . . .

Continued from Page 2, Col. 3

extended on many orders, so that shipments have not yet caught up backlogs have increased. Overall, total components sales for the year were only slightly ahead of 1963's \$3.7 billion rate, with most of the gain occurring in integral circuitry. Shipments of integral circuit packages of all types were about \$225 million, compared to \$155 million in 1963. Sales of such complex components as filters, networks, and functional assemblies were about \$175 million, compared to \$144 million in 1963: shipments of integrated microelectronic circuits, both semiconductor and thin-film, more than doubled to \$50 million from \$24 million the previous year.

The dollar figures do not, however, indicate the rapid rate at which integrated circuit production is increasing, because the average price of such circuits has declined by about one-half in the last year as a result of greatly improved knowledge of process technology and better production yields. Furthermore, new technologies such as field-effect and metal-base semiconductors and MOS circuits are continually broadening the capabilities of integrated circuitry as presently conceived. And even more sophisticated approaches to the synthesis of circuit functions are under investigation.

In 1965, components sales should pass the \$4 billion mark, with microelectronic circuit volume increased by about one-third to \$300 million. Total integral circuit package sales will be about \$430 million in 1965; by 1973 our projections indicate a tripling in this business to \$1.2 billion a year.

Altogether, I look for total electronics industry sales to increase by about 6 per cent in 1965, to a little more than \$17 billion. Beyond 1965, I believe our industry can continue to maintain a growth rate on the order of 5-6 per cent per year, but this growth will have to come largely from

Three Sprague Electric employes recently received completion certificates from various correspondence schools.

Charles (Dick) Beck, a Process Engineer in the Transistor Process Engineering Department, began his studies in the Business Curriculum with Alexander Hamilton Institute in 1961. He received his certificate for successfully completing the curriculum this past fall.

The twenty-four subjects covered in the program involved case problems, text material and examinations. A few of the subjects covered were on Business Organization, Economics, Marketing, Office Administration, Public Relations, Advertising, Accounting, Banking, Plant Management, Production Control, Cost Control, and Insurance.

Richard MacLeod, a Deionized Water Operator in the Concord Service General Department began a course in Water Treatment Fundamentals with the Water Conditioning Foundation Institute in October, 1963. He received his certificate for successful completion in October, 1964.

Herbert Wishart, a Lab Technician in the Tantalum Research and Engineering Lab, began the Electronics Technician Curriculum with the International Correspondence Schools in January, 1964. He received his certificate in October of the same year for successfully completing the required forty-two subjects.

A few of the subjects included in this curriculum were Geometry and Trigonometry. Logarithms, Vacuum Tube Fundamentals, Radio Communications Fundamentals, Algebra, Physics, Microwave Techniques, and Transistor Circuits and Application.

Any Sprague employe can take advantage of the Educational Sponsorship Program under the direction of Courtney W. Flanders, Training Director, provided they have been employed with the Company for at least six months.

The Company will sponsor those wishing to attend college - wheth-er it be working toward a degree or taking a few advance courses pertaining to the field in which you are working. Correspondence Schools and evening schools are also included under the sponsor-ship program.

All one has to do is to pick up the application forms from the Industrial Relations Office, complete them, and obtain the approval of your Department head, Manager, and Training Director.

#### Industry Week Show . . .

Continued from Page 1, Col. 5 shire Sprague Plants, and a number of Company publications of interest.

Concord products included various types of tantalum capacitors, ransistors, and UNICIRCUITS. The display, manned by New Hampshire Industrial Relations personnel, generated considerable interest among the University faculty, student body, and the public.

industrial, consumer, and nonmilitary Government business. Fortunately, the evidence points to the expansion of all of these markets.

#### Worcester . . .

Continued from Page 1, Col. 2 for the permanent Plant site, pending rezoning. The site is located off East Mountain Street in the northeastern section of the city, near the projected extension of the city expressway system.

The new facility will be about 95 miles from Sprague Electric's home offices and plants in North Adams, Massachusetts, and about 90 miles by interstate highways from its Semiconductor Division Plant in Concord, New Hampshire. Closeness to these key company operations will provide ready liaison between the new Worcester facility and Sprague Electric's Research Center and Engineering Laboratories in North Adams, as well as with Semidonductor Division management and engineering.

The Worcester Plant will enable Sprague Electric to capitalize on its extensive competence in the new and promising field of microelectronics. Large-scale production of silicon and ceramic-based microcircuits is planned for Worcester, as is manufacture of other new semiconductor products to be announced later this year.

Marketing projections made by the Company indicate a dramatic increase in sale of microelectronic circuits over the next decade, as well as requirements for three to four thousand new employes Company-wide by 1973.

An extensive plant site search for this new facility was conducted by Sprague personnel. A number of potentially attractive areas were examined first-hand in the Northeast, Midsouth and Midwest prior to final selection of Worcester. Primary criteria in the plant survey included nearness to strong educational facilities, with emphasis on leadership in the solid-state field, and to key company operations; size and mix of labor market: and communityarea living and recreational attractions.

The Company spokesman said that Sprague Electric believes Worcester meets the key criteria better than any other area surveyed. In Worcester Polytechnic Institute, College of the Holy Cross and Assumption College. In addition, Worcester is near Massachusetts Institute of Technology, Harvard and other international py-recognized educational and research institutions in the Boston-



#### Two New Groupleaders Named For Final Test

Two former technicians were recently appointed Group Leaders in Final Test.

James Hawkins began employment with the Sprague Electric Company in August, 1961, as a Lead Attacher Technician. He graduated from Delavan High School, Illinois, in June, 1957, and joined the U.S. Air Force in August of the same year where he took Electronic Fundamentals courses and worked as a Bomb Navigational Technician.

George Relf began employment with the Sprague Electric Company in June, 1964, as a Final Test Technician. He received his diploma from Newton Vocational High School, Massachusetts, in 1956 and served four years with the U.S. Air Force as an Air Borne Radio and Navigational Radar Repairman.

Cambridge area, all within an hour's drive of the new plant site.

The Worcester Area Chamber of Commerce played a prominent role in interesting Sprague Electric in the city, as did city government and business leaders.

The Company plans an orderly expansion of facilities at the new Worcester site over the next several years. The first segment of the plant is targeted for operation by next fall in 80,000 to 100,000 square feet of space. Provision has been made for ready expansion on the site to a quarter-million square feet as soon as required.

#### A Touch Of Humor Producer: "Have you had any stage experience?"

Girl: "I once had my leg in a

"I don't like Bill," confided a co-ed to her roommate. "He knows too many naughty songs."

"Does he sing them to you?" asked her friend.

"Well, no, but he whistles them."

# **NET&T Conducts Telephone Training Sessions For 175 Sprague Employes**



Representatives from the New England Telephone and Telegraph Company, Mrs. Marilyn Pike, left, and Miss Dorothy Crosby, right, were in the Plant on January 5, 6, and 7, to conduct 10 training sessions for all personnel using telephones. They covered telephone courtesy and correct usage.



William Roberts of Department 732, is pictured here with his family, from left to right, Steve, 4; Lyn, 8; Bill's wife Arlene; and Janice, 7.



Norma Jean Blake is the ten year old daughter of Evelyn Blake of Department 721. days are longer now - see you in



Norma Jean's brother, Steven, age is pictured here beside his sister. day, December 17, A smorgasbord



Douglas Dow, age 5, is the son of Marguerite Dow of Department 721. try nights ... Rena Preve has

#### DEPARTMENTAL NEWS . . . .

AUTONETICS By Roberta Chase

I hope you all had a Merry Christmas and a Happy New Year. Sylvia Lodge saw the New Year in at Times Square with friends. She also went sightseeing . . . Walter Warriner and his wife went to the Ice Capades New Year's Eve and ate at the Oyster House ... Bob Locke is starting the New Year by growing a mustache. By the way, what does Phyllis Nolin have to say about Bob Locke's mustache?

We would like to welcome Laurette Kimball and Tina Reardon to our Department ... Edna Baron left us to await the arrival of the stork ... The girls gave her some diapers, shirts, and pajamas. Lots of luck to you, Edna ... Aurea Laliberte's son, Paul, was discharged from the Air Force and is working in Transistors on the Second Shift Bea Welcome went deer hunting during her vacation, but the only deer she saw was while she was riding in the car. Oh well, better luck next year, Bea ... Elaine Montminy, Pat Hewitt, Irene Cadrett, Nancy Pelissier, Roberta Chase, Albina Morse, and Hazel Sinclair, all went to the China Dragon to eat at Christmas time. Some of the girls came back with pineapples. Where do you suppose they got those? ... Well, that's about it for this time. I'd like to take this time to wish you all a happy and prosperous New Year.

#### GERMANIUM PRODUCTION Second Shift

#### By Cecile Boisvert

The holidays are over, but were enjoyed by all ... We want to wish a speedy recovery to Gwen Knight who is spending a few days in the hospital. Hurry back Bill Roberts needs you We want to welcome Peggy Paradise to our Department. Here's hoping you have a longer stay this time ... Congratulations are in order in Department 721 for David Perron who is engaged to Sim Gagne. They are planning their wedding for July 5. Never too late to change your mind, The first half of the Dave ... bowling season is over. Ronnie Morin has taken high single, 216, and also high triple, 593, and Kathy Hale has taken high single, 197, and also high triple, 520.

I want to bid you farewell. When the next issue comes around, you will have a new reporter. I shall miss everyone of you I had contact with.

#### MACHINE SHOP By Fred Clemens

The Christmas and New Year's holidays brought many happy hours to all the personnel of the Machine Shop. We had a big feed in the shop the day before New Years. Each donated different kinds of food and we ended up with a banquet ... Thoughts of sports and hobbies have now taken over and, of course, many of us are looking for an early spring Paul Simard is repairing the body of a car ... Dick Hardy has a half dozen bob houses for ice fishing, but they are all afloat in this warm weather ... Paul Currier keeps making trips to Boston - there must be a girl there ... Clayton Longver still continues to complete his home but does get some fishing in with ... Rod Spaulding, Jerry Dick Courchene and myself are fixing up our boats and making plans for the early spring ... Jerry still has to finish rebuilding the upstairs of his home ... Norm Giles has us all topped - he is awaiting the moment for the arrival of a new addition to his family We are all glad there are but a few more cold weeks - even the

TRANSISTOR FINISHING By Sandra Baker The holidays are over at long

the spring!

last. The months before Christmas and New Years are sometimes hec-We have had a few new faces and some old ones have left. Mary Ann Weeks left Sprague to manage the Canteen on Main Street, Concord. Judy Gilbert left to stay home with her baby and Robert Keyser is leaving our Department to work in the Machine



Tim Morrill of Department 438 and his wife, Joyce, danced up a storm at the Christmas Party given by Mr. and Mrs. Bruce Bonnette.

Shop, Frances Pugliese, our Q.C. Inspector, left us to wait for her baby. Marie Baker is our new Inspector. Ann Baker was transferred from Second Shift to First and Phil McManus was transferred to our Department from Department 724 ... Dana Ordway's little boy was a year old the 24th of December ... Veronica Newman's son returned to Fort Dix on Christmas Eve and was engaged to Miss Frances Burton of Pittsfield, New Hampshire who is attending the University of New Hampshire ... The Department Christmas party was held at the Franklin Pierce House on Thurssupper was enjoyed by all and an exchange of gifts. Some of us went to Veronica Newman's house after the party. We felt a little dragged out at work the next day! Gifts were presented to Roland Blazon, Mike Smith, Dana Ord-way, Bob Keyser and Helen Foley in the cafeteria on the Thursday before Christmas where we also enjoyed coffee and cake. Helen Foley is the proud grandmother of a baby boy born the 23rd of December - there are five girls besides. He weighed 9 lbs., 7 and one-quarter ounces. Virginia Austin is the grandmother of a girl born January 4. She weighed 8 lbs., and 14 ozs. This makes seven grandchildren. Congratulations, grandmothers! ... Frances Van-Dyne received a beautiful color television set for Christmas from her son. Happy viewing, Fran! ... We were sorry to hear that Stella Allaire's husband cut his hand quite badly on a machine. We hope it won't be as long as expected before he is back to work again.

#### TANTALUM PELLET PREPARATION By Virginia Bickford

First, I would like to mention our five year service award banquet that was held at the New Hampshire Highway Hotel a while ago. None of us have forgotten the wonderful time we had ... All of Tantalum joined in Christmas party celebration at the New Hampshire Highway Hotel where a most enjoyable evening was had by all. It seems a shame that these good times are few and far between ... June Florence is brand new Falcon sporting a which she likes very much, and Mary Labbe has a Ford Fairlane which is new to her and very nice looking ... We are glad you finally got that AM-FM radio you wanted so badly, Gary, and that new top coat will come in handy when you go out on the cold win-

been putting everyone's eyes out with that new diamond ring her husband gave her for Christmas. It sure is pretty! By the way, George, was that you someone saw looking in the jewelry store window a while back? ... Bob Chase and his wife took a trip to Bainbridge, Maryland, recently to see their daughter. Donna graduated from Boot Training. She is now at her home on a fourteen day furlough after which she will report to the Great Lakes Training School in Michigan for 28 weeks .. Barbara Briggs, her husband and another couple had a fabulous time New Year's Eve at the Highway. Rena Stebbins, Myrtle Hardy, and Aurea Crevier are now a part of Department 730. Aurea enjoyed a two week vacation in January ... By the time this goes to press, Cheryl Miner will be Mrs. Newman. Cheryl was married January 30 to Floyd Newman at Immaculate Conception Church in Penacook. Floyd is stationed in Florida and Cheryl remains in Penacook where they have an apartment. Good luck and lots of happiness to you both from all of us. Cheryl.

Eileen Gay is a newcomer to our Department. Eileen lives in Pembroke. We hope she will like it here with us ... Though we are well into the New Year, I hope it isn't too late to say, Happy New Year, everyone!

#### TRANSISTOR DEVICE DEVELOPMENT ENGINEERING By Blanche Prescott

Happy New Year to all and a healthy, prosperous year ... Welcome to all new people in Department 422. A new girl in our Evaluation Group is Christine Richardson. Monica Vien has been working with us in Testing part time and we enjoy having her ... Congratulations on Monica's recent engagement to Tom Keefe, formerly a Technician in the Development Lab. Lots of luck and





Two children of George and Dorothy Baker of Department 422 are pictured here. Louis is 14 years old and his sister Sharon is 12.



Holly,  $2\sqrt{2}$ , and Pamela, 9 months, are also the children of George and Dorothy Baker.



Dana, 14, and Bob, 11, are the sons of Ruth Proctor of Department 721.



It looks as though Santa was good to Robert Allen Pettingell. He is the 19 mo. old son of Linda of Department 721

happiness to you both in the future ... For the first time, the Evaluation Group celebrated Christmas at the China Dragon on December 17. Thanks to Steve Cullen, Andy Durette, Grant Avery, and Ray Duquette for the most enjoyable evening. Lori Wells, Christine Richardson, and Yours Truly made up the rest of the party. We all had a grand time. I'll bet you were glad, Andy, you didn't have to do the dishes after all. Andy sure missed his calling in life - he should have been on the stage - really quite an entertainer ... Dorie Miner, Lori Wells and I went to Helen McLaughlin's in Barnstead for a New Year's Party. Had a real swell time . . . Philip Bokil is back working in the Development Group once again. He worked here this past summer. Hope you'll like it here and stay a long time ... Roxie, Peggy, Nancy, Jeannette Fifield and Jeannette Avery, Monica, Barbara, Beverly, Elsie, and Helen all had a Christmas Party and exchanged gifts at Linda Johnson's house December 14, with Linda as hostess ... Nancy Huckins has been promoted to Pilot Technician, but it went to her head! All fooling aside, the new hair do looks very nice ... David Clapp is replacing Tom Keefe, who has re-enlisted in the Submarine Service in the Navy ... Ki celebrated New Years early by having an accident. Just the car had breaks, bumps, and abrasions, and had to be hospitalized for a while ... Roxie Racine and Nancy Huckins had holiday vacations ... Jeannette Fifield is back after having an operation on her legs. It sure was quiet here. Jeannette! Glad to have you back.

# TRANSISTOR PROCESS CONTROL First Shift By Barbara Mayo

Again another year has passed.



Donna Lawrence SA is the daughter of Mr. and Mrs. Robert Chase. Bob works in Department 730.



Nine month old Carla Jean is the daughter of Joseph Russo of Department 721.

We have begun our journey into a New Year with lots of snow and sleet, low temperature, etc., etc.

The Five Year Service Award Banquet held last November at the New Hampshire Highway Hotel was attended by many from the Concord Plant. Recipients of the five year pin from our Department were Eileen Buskey, Bernice Hardy, Margaret Purtell, Geraldine Schlehuber, Marion Dunbar, Jane Grey, Cecile Boisvert, Ralph Spencer, and Paul Croteau. Congratulations everyone! One little thought to bear in mind - five more years and you'll have a ten year pin! ... Process Control and production enjoyed a Christmas buffet along with the exchanging of gifts December 23rd in the cafeteria. ... There are a few new faces in our Department - Henriette Banks, Linda Presby, Sharon Regal, and Judith Miller. Welcome aboard, girls. Also, we would like to welcome back Marion Dunbar. We sure missed you, Marion ... Eileen Buskey has joined us. She replaced Phyllis Cummings who left. In Area I, Cecile Boisvert will be the new Metallurgical Inspector, joining us from Second Shift. Hope you like the Day Shift, Cecile ... Congratulations to Mr. and Mrs. J. "Nick" Edwards and their new baby ... At last, but not least, I would like to thank all those who voted for me as their representative for the Problem Panel. Please feel free to talk with me about any problems you may have or would like taken to the Panel ... Well, I guess this is it for now. See you in the next issue.

# GERMANIUM PRODUCTION Third Shift By Avis Small

A Happy and Prosperous 1965 to all! Our shift enjoyed two delicious holiday suppers in the cafeteria. One at Thanksgiving and the other at Christmas. San-

This picture of John Saucier was tak-

en when he was  $6\frac{1}{2}$  mos. old. He is the son of Georgette Saucier of De-



David Hann is the three year old son of Beverly Hann of Department 721.

ta, with a pretty red suit and long white beard, gave out the huge pile of gayly wrapped packages - thanks, Paul. All of us who enjoyed these feasts, fit for a King, want to thank all those who worked so hard planning and supplying food ... Marie Smith and Avis Small both celebrated wedding anniversaries in November. Marie has been married 20 years and Avis, 25 years.

Norma Dowst's son came home from the Navy for the holidays. Richard Dowst, IC 3, is attached to the Carrier USS Wasp. Avis Small had her son, who is also in the Navy, home. Her son,



Pictured here so peaceful looking is Tracy Brenda Harrington, the granddaughter of Alva Lewis of Department 437.

James, TM3, has reported to the USS Grenadier, a submarine, based at Key West ... Glenn Miner is the proud father of twin daughters born November 21. The girls are named Linda Lee and Lisa Anne. Congratulations, Glenn ... Betty Magoon has a new daughter born January 3. Her name is Debra Ann. Debra is Betty's 7th child. Best wishes to mother and daughter ... Evelyn Bosiak's husband, Pete, was home from the hospital for Christmas and again at New



Dennis, 11; Patty, 7; Roger, 3; and Cindy,  $2\frac{1}{2}$ ; are the children of Dorothy Gullen of Department 721.



This picture was taken of Peter Sanville when he was 6 mos. old. His mother, Esther, works in Department

Years. Pete has been hospitalized since September 29 as a result of a farm accident. We hope he will soon be home to stay ... Stan Webster, Dick Jewell, Bruce Grey, Don Ross, Paul Huckins, and Gerald Smith, went to Boston to see the Boston Patriots and Buffalo play football. This was the game that was played in the snow - not really ideal weather to play football nor to sit in the stands and watch. Guess the gang all had a good time and they tell me Dick had to rest all the way home ... Anne Barker got a special "Hapby New Year" greeting when her son, John called her from Sioux Falls, South Dakota ... When you start to remodel a home, one thing just leads to another as Diane Cote and her new husband, Gene, have found out. We wish them many years of happiness in their new home in Manchester ... Larry Hooper attended a family reunion in Biddeford, Maine on New Years. Fifty one members of his family attended . . . Lola Millett is at home because of a broken leg suffered in a fall one snowy morning on the way home. We miss you, Lola.

#### TEST EQUIPMENT ENGINEERING By Wayne Wooley

Now that we're over our holiday hangovers, we can settle down for the year ... We'd like to welcome two newcomers to the Department. Ron Hardy, who will work in the repair section, and Bill Horne, to the construction section ... Herm Young was the only lucky hunter from our Department. He shot a spikehorn while on his annual safari to Maine. We all had the same luck at home ... Bob Guimond bagged a melanepes erythrocephalus the first day of duck season, which is quite a feat ... Bob Ward is buying a controlling in-



Richard E. Dowst is the son of Norma Dowst of Department 721.

terest in Dr. Carpenter's business.

Maybe that's why he was so insistent we buy a dentist drill. For the shop? I heard Joe Bieniek bought a cow bell for Henry Smith to wear at the next NEREM Show. It seems Mr. Smith got lost this year ... Dave (Roadrunner) Daniels got stopped for speeding on the airport parking strip. He was on foot at the time. Dave is building a house on River Road. If he can build as fast as he can walk, he'll be living there before he knows it. Happy Income Tax Returns, everyone. See you next issue.

# GENERAL OFFICE By Sandra Murphy

Irene Johnson is a new member of the Purchasing staff. Irene has just come to the United States from Scotland. Welcome to Sprague Electric, Irene! ... We wish to congratulate three new home owners - Mr. and Mrs. Walter Matulaitis, Mr. and Mrs. Bruce Luckenbach, and Mr. and Mrs. Robert Collette. May you have joy and prosperity in the years to come ... Upon the completion of inventory, a party was held on December 12 at the home of Norm Robinson. Singing and dancing was enjoyed by all who attended ... Irene and Dave Johnson spent New Year's Eve in Trenton, New Jersey visiting friends while Jackie Forest and Dane Malcolm were in Boston for the holidays.

# GERMANIUM PRODUCTION First Shift

## By Jane Morrill

Department 721 has been a beehive of activity of late with Cupid's arrow striking a target repeatedly. It would seem that the atmosphere has a definite trend to the romantic side ... Among recent marriages were those of Robert Bouchard and Luranna Fife and Larry Potter and Sharon



This picture was taken of Chris Myers at 7½ mos. old. His mother, Jacqueline, works in Department 721.



Pictured here is 15 year old Nancy Woodman. Her mother, Edna, works in Department 720.



Paul Simard of Department 435 is the father of the two children pictured here, Carleen is 4 years old and Paul, Jr. is one year old.

Mattice, all of whom were married in October ... 721 is losing a five year employe - Gladys Riley, who is leaving in January. We will all miss you, Gladys - Good luck! ... Bonnie Frost, deughter of Eleanor Frost of Area 2, has announced her engagement to James Audet of Concord.

#### MARKETING By Judy Everett

Elfreida Peightell's daughter, Beryl Woodfill, became the bride of Ernest St.Laurent on December 5 in Pittsfield, New Hampshire. Both are former Sprague employes Congratulations are extended to Brian and Claire Hendricks on the birth of their daughter, Lisa, and to John and Dianne Upton on the birth of their daughter, Eliz-.. Beverly and Ken Haskell will be living in their new home in Bow by the time you read this. When are you throwing that party you have been telling us about, Bev? ... All of us girls in Marketing enjoyed a Christmas luncheon at Chase's Restaurant where we also exchanged gifts Too bad we can't do it more often ... A special thank you to Ted Perreault for loaning us his Mah Jongg game. Bette Archibald, Shirley Brannock, Mary Jean Newell, and I have been having a great time with it - if you ever want to sell it, Ted

## TRANSISTOR PREPARATION By Joyce Heath

Our news this month is all about engagements. Sandra Williams is engaged to Barry Lahey of Weare, Leonard Burritt is engaged to Loretta Cuchene, Robbie Roberts is engaged to Linda Witham of Department 799, Peter Coleman is engaged to Judy Redcliffe of Pennsylvania, and Mike Bobblis is engaged to Irene Roy of Department 721.

#### TRANSISTOR Q.A.R. By Barbara Gibbs

The holidays are over, and we can all settle down to our more



This picture, taken a few years ago is of Len Burritt, now Supervisor in Department 720.

or less normal routine ... reporter hopes everyone had a very Merry Christmas and extends wishes for a very Happy New Year ... Sad to relate, but because of the holidays, there is very little news to report this time. We have had our traditional "cake breaks" for the following people: Joyce Gullage's birthday was October 22 and Frances Pugliese, who is now on a leave of absence expecting a new arrival, baked her cake. Joyce baked the cake for Cathy Ansaldo, whose birthday was December 16, Cathy baked the cake for Toni Counter, who celebrated her birthday on December 28, and Toni baked the cake for Carlene Dahood and Marie Baker, who celebrated jointly on December 22. We all had fun and too many calories ... Congratulations to Jackie Bergevin on the birth of her daughter, Diane Alice and we welcome Jackie on her return to work ... Congratulations also to Nick Edwards on the birth of a daughter on December 11. The new arrivals name is Elizabeth Kent Edwards ... Glennys Brown has discovered that she is not as young as she thought or as young as she needed to be for her ice skating exhibition over the holishe has the bruises to days prove it! ... Guess this is it for this time. Will try to have more news for you all next time.

## SEPT PRODUCTION By Jeanne Gingras

Everyone seems to have a sigh of relief that the holidays are over. It certainly has been a hectic season, but from all reports, everyone had a very nice Christmas. Diamonds seemed to be a popular item in our Department. Pat Wilson and Elsie Bruten each received a diamond ring and Ruth Philbrick, a beautiful diamond watch .... Among those making trips for the holidays were Helen Anderson, who motored to Minnesota, Ann Milner motored to Pennsylvania, and Ken Klauck, finally made it



This picture was taken on June 18, 1946. It is of Pauline Otterson of Department 723.

to Milwaukee after all his trouble This year, our Christmas party was held at the home of our Supervisor Bruce Bonnette. Among our entertainers were Ken Klauck and our Foreman, Ed Jasiewicz, who sang a few songs, and to our surprise Ken's wife gave us a few renditions on her accordion. It was a very nice evening We are all patiently waiting for what the stork will bring Joanne Steed. We all hope it is a girl. A surprise shower was given to Joanne at Chase's restaurant. A corsage was presented to her and many beautiful gifts. Good luck, Joanne ... Pat Davis' son has now returned to college in Colorado after spending the holidays with his family.

Among those bagging deer were Allen Wright, weighing 128 lbs., Jack Earle almost made it but got just one-half of one. Better luck next time, Jack. This will be all for now until the next issue.

#### SILICON By Mary Mitchell

Silicon has two new girls Sharon Regal, who does process
control, and Bonnie Green, who
works on production ... Bea Girard is the proud grandmother of
a new grandson, Jeffrey Leo, born
December 19, 1964 ... There is
one girl in Silicon who likes to
drive her car down the center strip
of the turnpike. Personally, I pre-



This little five year old miss is Mary Ann, the daughter of Shirley Severns of Department 721.

fer the road ... Leona Geary Helen Truchon, Frances Hunt, and Mary Mitchell went out to supper at the Brick Tower in December to celebrate Christmas. We had a wonderful time ... Betty Phelps is leaving to start a new job in Boston. Good luck, Evelyn Noel spent a few days in the Concord Hospital. All of our thoughts are with her Anyone for chicken dumplings? Bud Heath is butchering his chickens. I am glad that is not going to be my job.

Bunny Mahoney has bought an apartment house on Perley Street in Concord ... Bonnie Green's son, Rusty, will celebrate his first birthday January 23 ... Happy skiing and skating to everyone.

#### Engagements

Edith Bockus and Kenneth Pur-

Simone Gagne and David Perron Constance Parichand and Lyster French

Irene Roy and Michael Bobblis Brenda Stevens and Richard King Linda Witham and Elwood Roberts

Patsy Yeaton to Emerson Densmore

#### Benefit Fund Members Elect Administrator

A vacancy for a non-management member of the Sprague Electric Concord Employes Benefit Fund Administrative Committee was recently filled with the election of Patricia Gagne.

Nomination Ballots were placed on the cafeteria tables during the second week of December, and an election ballot with the names of those nominated was distributed to the Benefit Fund members during the last week of December.

The Administrative Committee consists of six members, three non-management employes, one from the management group, one from the Corporate Industrial Relations Department of the Sprague Electric Company and one from the Industrial Relations Department of the Concord Plant. The term of an officer is two years.

The officers of the Administrative Committee are as follows: Chairman, Stuart Sutherland; Secretary, Elinor McManus; Treasurer, Kenneth Brown; Administrators, Patricia Gagne, Paul Gaillard and Janice Leahy.

The Chairman's duties is to preside at the meetings of the membership and of the Administrative Committee. The Secretary keeps accurate records of all meetings

#### Anniversaries

November 20 - Mr. and Mrs. Richard Smith - 20 years November 25 - Mr. and Mrs. David Small - 25 years November 30 - Mr. and Mrs. Wil-

November 30 - Mr. and Mrs. Wilfred Preve - 25 years December 7 - Mr. and Mrs. Roland

Shonyo - 18 years December 14 - Mr. and Mrs. Basil Woods - 12 years

December 29 - Mr. and Mrs. John Bruten - 31 years January 9 - Mr. and Mrs. William

Fifield - 11 years January 11 - Mr. and Mrs. Arnold

Foote - 14 years January 12 - Mr. and Mrs. Laura Berard - 13 years

January 21 - Mr. and Mrs. Maurice. Giroux - 4 years

January 23 - Mr. and Mrs. Louis Bellman - 5 years January 31 - Mr. and Mrs. William Sinclair - 6 years

February 3 - Mr. and Mrs. Richard Skivington - 20 years February 12 - Mr. and Mrs. Ed-

ward Riley - 11 years
February 16 - Mr. and Mrs. Richard Hardy - 8 years

February 19 - Mr. and Mrs. Harold Whittemore - 10 years

February 20 - Mr. and Mrs. John Genest - 5 years February 21 - Mr. and Mrs. Robert Guimond - 6 years

February 23 - Mr. and Mrs. George Barter - 14 years February 25 - Mr. and Mrs. Charles Chase - 26 years February 25 - Mr. and Mrs.

February 25 - Mr. and Mrs. Wayne Wooley - 4 years February 27 - Mr. and Mrs. Hugh Sargent - 5 years

March 29 - Mr. and Mrs. Sherwood Griffin - 18 years February 18 - Mr. and Mrs. Francis Kendall - 16 years

February 25 - Mr. and Mrs. Charles Lang, Jr. - 10 years

#### Weddings

January 23 - Jo-Ann Fossett to Robert Raymond January 30 - Cheryl Miner to Floyd Newman

February 5 - Hazel Vagg to Ernest Wiggin of the membership and of the Administrative Committee. The Treasurer reports the current condition of the Fund to the Administrative Committee and signs checks for disbursements from the Fund which have been authorized by the Administrative Committee. The duties of the Administrators are to pass on which agencies are to be supported and the amounts of money to be given such agencies. They have further duties of helping recruit new Benefit Fund members. There are approximately three meetings per

The organizations now being supported are the Concord United Fund, New Hampshire Heart Association, National Foundation for Infantile Paralysis, New Hampshire Division, American Cancer Society, Crotched Mountain Foundation, New Hampshire T.B. Association, New Hampshire Association for the Blind, and the Greater Concord Mental Health Association.

#### Suggestion Program Has Banner Year At Concord The year 1964 set a record for

suggestion awards at the Concord Plant. Fifty-six employes shared in awards totaling \$3,913.65 for seventy-nine ideas accepted and utilized by the Company. This figure supercedes the previous high of \$3,023.00 paid for suggestions during 1961. The Suggestion Committee considered a total of one hundred ninety-eight suggestions at its monthly meetings during the past year and rejected one hundred nineteen.

The largest single award, totaling \$696.00, was paid to Bob Chase, Department 730, for his idea to improve a tantalum capacitor production process. Bob was also the largest winner for the year, accounting for \$991.00 of the total paid. Other large single award winners were Peter Gilbert, Department 434, \$218.00; Carol Clark, Department 721, \$212.00; Bob Keyser, Department 722, \$140.00; and Herb Carberry, Department 426 and Nate Chapman, Department 724, who split a \$280.00 award.

The program has been in operation in Concord since 1960, and is open to almost all hourly rated personnel. The ratio of accepted suggestions is about one to three. If you have an idea, put it in through the suggestion forms found throughout the Plant. The fifty-six winners for this year are evidence that ideas can be turned into cash. Let this be your year for becoming a suggestion award winner.

#### Births

October 12 - Mr. and Mrs. Brian Hendricks - Girl

November 21 - Mr. and Mrs. Glenn Miner - Twin Girls November 22 - Mr. and Mrs. John

Upton - Girl

December 4 - Mr. and Mrs. John
Beauchesne - Boy

December 10 - Mr. and Mrs. Almore Perron, Jr. - Girl

December 20 - Mr. and Mrs. David Saltmarsh - Boy December 23 - Mr. and Mrs. Mi-

chael Ryan - Boy January 3 - Mr. and Mrs. Calvin Magoon - Girl

January 4 - Mr. and Mrs. Charles Glover - Boy

# Sprague Sports . . .

## by Al Sieradski, Carol Thornton and Ann Towle

## 2nd Shift Bowling

By Ann Towle

The Second Shift has done quite well in organizing a thirty member league. They have ten teams. Hope the First Shift girls will start a league next fall.

Ron Morin is President and Gene Harreck is Secretary. Both are doing a fine job.

Sorry to hear the Jerry Rheaume had to stop bowling because of a transfer to First Shift. Some have stayed with the League after such a transfer but it does make it a little difficult.

Kathy Hale has high single (197) and high series (520) with an average of 133. Keep up the good work, Kathy. You're doing very well. Ron Morin has high single (216), high series (593) with an average of 171. You haven't changed, Ron. Still bowling up a storm as always. The Do-Gooders, D. Mussey, C. Glover, and M. Emond, are top team. Stay on your toes Do-Gooders. You're up against tough competition.

This is the Second Shifts third year in midnight bowling. I'm sure it will continue for a good many more leagues in the future. The men have a 40 men league on First Shift. We hope the girls on First Shift will do likewise.

## Programmed Course Begins For Management Group



W. Flanders, Corporate Director, North Adams, Training Mass., is shown here conducting an American Management Association Training Session for management personnel at the Concord Plant on Responsibilities in Labor Relations.

Twenty members of the Concord Management Group began an eight lesson course in Responsibilities in Labor Relations on November 23, 1964.

The course, taking ten weeks to complete, is based on a programmed learning text developed by the American Management Association and under the direction of Corporate Training Director, Courtney W. Flanders.

This course marks the second time the programmed learning technique has been used for group training at the Concord Plant. Last year a group of twenty-eight Foremen and Management Personnel completed a programmed course in Cost Reduction and Control.

The procedure is based on theories of learning and behavioral science and involves the step by step assimilation of series of information units. The student is continually tested on past material, and on the basis of a right answer, is rewarded or reinforced to go on to the following step.

#### Men's Sports By Albert Sieradski BASKETBALL

The Industrial Basketball League season is underway with the Sprague entry off to a fine start. Although we have a record of one win and two losses, and are in the cellar, coach, Gary Philbrick, says Sprague has put their all in the games and could have a perfect slate with a few breaks.

Sprague's top scoring forward, Bob Burritt, is well up in the top ten scorers in the League and paces the Sprague team.

By the next Concordian, I hope to report on better news from the Basketball world.

The entrys in the League are Patsy's Garage, National Guard, United Life, Rumford Press, Universal Packaging. Members of the team are Gary Philbrick, Manager, Bob Curtis, George Ford, Bob Burritt, Bob Brackett, Bill Morrill, Jim Hawkins, Bruce Grey, Bob Anderson, and David John-

#### BOWLING

Team 6, captained by Red Locke, is leading the Men's candlepin bowling with 4355 points. Bill Baron's Team 3 is in second place with 4310 points and in third place is Bob Hale's Team 5 with 4387 points. The fourth place team is Team 1, captained by Len Burritt with 4209 points, in fifth place is Team 2, captained by Paul Gaillard with 4284 points and in last place is Team 4 captained by Louis Bellman with 4165 points. Individual high averages go to Bill Baron, 103; Len Burritt, 103; and Red Locke, 102. Individual high single goes to Red Locke, 143 and individual high three games go to Red Locke, 360, Len Burritt, 350; and Bob Hale,

Bowling members and their averages are as follows: Bill Baron, 103; Len Burritt, 103; Red Locke, 102; Paul Gaillard, 101; Bob Hale, 101; Louis Bellman, 100; Bob Collette, 99; Red Locke, 98; John

## Be Careful In The Parking Lot

Crowded conditions with people on foot and cars going in every direction usually exist when shifts change or at the start and close of work each day. To prevent accidents ... take your time, do not hurry, do not try to beat the other fellow. Pay attention to what you are doing, where you are going, be on the lookout for other people and vehicles on the move. Stay in designated walking areas, avoid darting out from behind parked cars. Use caution and courtesy at all times.

## Did You Know?

About \$3.57 per week in your Credit Union share account will help you to be a thousand dollars richer in just five years.

The concept of programmed learning, though developed in recent years, is increasingly being utilized in Government and schools as well as industry.

Information on how you may obtain a variety of general as well as scientific programmed courses for home study is available by stopping by the Industrial Relations Office.

Remick, 97; Ken Brackett, 96; Harry Littlefield, 95; George Shelton, 94: Hank Gould, 94: John Puppolo, 94; George Baker, 93; Ed Jakusik, 93; Paul Garnish, 92; Dick Zinn, 91; Al Trottier, 91; Clayton Longver, 91; Dick Hardy, 90: Howard Woodman, 90: Bob Bouchard, 89; Carroll Dodge, 88; Rod Spaulding, 87; John Cushing, 86; Bill Boyd, 86; Bill Rand, 86; Bruce Luckenbach, 83; Jim Denoncourt, 83. The substitutes are Tom Howe, 96; Al Gilman, 94; Walter Matulaitis, 92, Al Moody, 91, and Jerry Gagnon, 86.

#### Women's Sports By Carol Thornton

The first half of the Women's candlepin bowling season is over. The results of the first half are as follows: The Live Wires took first place with a score of 84 wins and 36 losses. The Sharpies are second with 55 wins and 65 losses. Missing second place by one point were the Poopers with a score 54 to 66. The Telstars were trying very hard but took last place with 47 wins and 73 losses. Better luck next half, girls!

Carol Thornton has the highest average of 92 Carol Merrill has the high single of 121 and Edna Baron has second high single with 120. Both girls are on different teams and the night they bowled the high singles, they were bowling each other. Edna Baron has the high triple with 319.

I hope to have some pictures for the next issue.

# Meet Your Reporter



Al Sieradski has been reporting the news for Men's Sports approximately three vears.

A native of Nashua. New

Hampshire, Al attended the Sacred Heart Grammar School and St. John's High School.

For the past three years, Al has been President of the Sprague Softball League and scorer for the Basketball League.

He enjoys swimming, leather work, trips to the mountains, deep sea fishing, and seeing the baseball games at Fenway Park.

Al lives in Concord with his wife. Alberta, and sons, Albert, Jr., 6; Tony, 5; and the twins, Daniel and Donald, 11 months.

## Float . . .

Continued from Page 2, Col. 5 The carousel, to be complete, had to revolve; therefore, a motor was placed under the base to make

Sprague won first prize for their float in 1962 and 1963. This was a silver bowl, a rotating trophy which is retained permanently after three consecutive winnings. This year the trophy went to the Lutheran Church.

In honor of the Float Committee a coffee hour was given in the Conference Room on December 23.

During the Christmas season the float was placed on display at the front of the building. Children from the neighborhood stood by the carousel watching it go around and from the expressions



U. S. POSTAGE BULK RATE PAID CONCORD, N. H. Permit No. 435



# Scientific Article By Dr. John L. Sprague To Be Immortalized At N. Y. World's Fair



Sprague, Senior Vice President -Engineering, will have an article entitled, "Integrated Circuits", which was published

in the April 1964 issue of International Science and Technology, immortalized when it will be buried, along with other material, in the Westinghouse Time Capsule at the site of the New York World's Fair.

A total of 23 articles were selected from this journal by the University of Pittsburgh Knowledge Availability Center for inclusion in the Time Capsule. They will be buried at the World's Fair site next year and are supposed to be undisturbed for 5.000 years

In Dr. Sprague's article he noted that development of integrated circuitry, microelectronics and molecular circuitry had been much faster than anyone anticipated although research and development had been going on in this field for nearly twenty years.

The first benefit sought was small size. During World War II the National Bureau of Standards introduced the idea of depositing

on their faces, the time and effort put into the float were well worthwhile.

Dr. John L. conductive and resistive inks on ceramic substrates, a concept which was to be the forerunner of printed circuits, and, later, the more sophisticated ceramic-based microcircuits.

> Work on thin-film microcircuitry has developed rapidly since the early 1950's. On the other hand, attempts at the other major approach - introduction of a circuit into a piece of semiconductor did not begin in earnest until after the middle 1950's. Again, small size was the desired result.

> In his article Dr. Sprague discussed new techniques in detail, but in conclusion noted that "there are many things which cannot be done as well or at all by integrated circuitry" and for this reason the discrete component manufacturer will "be around for a long time."

> While there has been much discussion about systems manufacturers building their own microcircuits, Dr. Sprague feels "the most logical arrangement will prove to be the classical relationship between component supplier and systems manufacturers." However, his concluding statement made one point clear "Ultimately, those who remain will be those who do the best job, be they component manufacturers, integrated circuit specialists, or systems manufacturers."